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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,794	02/01/2001	Norman G. Anderson	41039	2626

7590

07/27/2004

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EXAMINER

YANG, NELSON C

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/774,794	Applicant(s) ANDERSON ET AL.	
	Examiner Nelson Yang	Art Unit 1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16,18,22-24 and 81-87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 16,18,22-24 and 81-87 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

- I. Applicant's amendment of claims 16, 18, and 23 is acknowledged and has been entered.
1. Applicant's cancellation of claims 1-15, 19-21, and 25-80 is acknowledged and has been entered.
2. Applicant's addition of claims 81-87 is acknowledged and has been entered.
3. Claims 16, 18, 22-24, 81-87 are pending.

Rejections Withdrawn

4. Applicant's arguments, see page 5, filed May 25, 2004, with respect to the objection of claim 16 have been fully considered and are persuasive. The objection of claim 16 has been withdrawn.
5. Applicant's arguments, see page 5, filed May 25, 2004, with respect to the rejection of claims 16, 18-22 under 35 U.S.C. 112, second paragraph, have been fully considered and are persuasive. The rejection of claims 16, 18-22 under 35 U.S.C. 112, second paragraph, has been withdrawn.

Claim Rejections - 35 USC § 112

- II. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 86, 87 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. With respect to claim 86, applicant recites the limitation that different agents are immobilized in or on different fibers. Applicant then further recites the limitation that some of the fibers contain the same agent of interest (in different concentrations). These two limitations appear to conflict with each other, and further clarification is requested.

8. Claim 87 is indefinite for depending on an indefinite claim.

Claim Rejections - 35 USC § 102

III. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 82, 83, 86, 87 are rejected under 35 U.S.C. 102(e) as being anticipated by Stimpson [US 6,037,186].

With respect to claims 82, 83, 86, 87, Stimpson teaches a method of making an array where rods or threads of material are each dipped in a unique binding agent to allow uniform attachment throughout its length (column 4, lines 5-11). The rods are then formed into a bundle and sliced as thin as possible into individual arrays along the Z axis (fig. 1C, column 5, lines 30-35), and fixing one side of the array to an absorbant pad (claim 1).

Claim Rejections - 35 USC § 103

IV. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 16, 18, 22-24, 81, are rejected under 35 U.S.C. 103(a) as being unpatentable over Stimpson [US 6,037,186].

With respect to claims 16, 18, 22-24, 81, Stimpson teaches a method of making an array where rods or threads of material are each dipped in a unique binding agent to allow uniform attachment throughout its length (column 4, lines 5-11). The rods are then formed into a bundle and sliced as thin as possible into individual arrays along the Z axis (fig. 1C, column 5, lines 30-35), and fixing one side of the array to an absorbant pad (claim 1).

The method of Stimpson differs from the instant invention in failing to teach producing arrays with a thickness of less than 50 microns, 20 microns, or 10 microns.

However, it would have been obvious to slice the bundles to form sections with a thickness of less than 50, 20, or 10, microns, as it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

11. Claims 84, 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stimpson [US 6,037,186] in view of Walt et al.

Stimpson teaches a method of making an array where rods or threads of material are each dipped in a unique binding agent to allow uniform attachment throughout its length (column 4, lines 5-11). The rods are then formed into a bundle and sliced as thin as possible into individual arrays along the Z axis (fig. 1C, column 5, lines 30-35), and fixing one side of the array to an

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absorbant pad (claim 1). Stimpson does not teach that the binding agents are biological cells or microorganisms.

Walt et al, however, do teach the use of cells in fiber optic arrays. Walt et al further teach that the characteristics of an entire cell population as a whole can be studied with bulk measurements of sample volumes having a plurality of cells (column 2, lines 32-49). Walt et al further teach that the selectivity of living cells has considerable value and utility in drug screening and analysis of complex biological fluids (column 5, lines 35-55).

Therefore it would have been obvious in the method of Stimpson to use cells as binding agents, as taught by Walt et al, in order to utilize the selectivity of living cells in drug screening and analysis of complex biological fluids.

Double Patenting

V. Claims 16-18, 81-82, 84, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,713,309. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent recites a method for making an array that encompasses all the steps recited in the instant claims.

Response to Arguments

VI. Applicant's arguments with respect to claims 16, 18, 22-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. No claims are allowed.

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13. The following references are also cited as art of interest: Noonan et al [US 6,129,896], Kim et al [US 6,534,270].

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson Yang whose telephone number is (571) 272-0826. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson Yang
Patent Examiner
Art Unit 1641


LONG V. LE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

07/23/04